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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,144	03/23/2004	Jong Yeol Kim	4720-0108PUS1	1971
2292	7590	02/06/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			SAWHNEY, HARGOBIND S	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/806,144	Applicant(s) KIM, JONG YEOL	
	Examiner Hargobind S. Sawhney	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-8 is/are rejected.
- 7) ☒ Claim(s) 2-5 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/23/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show details as noted below, and as described in the specification.

In addition to Figure 8, the applicant should add exploded views showing: a passage hole 34 formed on the inside part of the winding core; and an insertion hole 35 formed on the circumferential surface of the winding core, Figure 8 does not provide details in a clear manner as the figure is drawn with a small scale.

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If

the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1-9 are objected to because of the following informalities:

Careful review and possible rephrasing of all claims are needed for clarity and definite recitations. Some of the observed needs are outlined below.

Claim 1, line 2, "the lamp" needs to be rephrased as --a lamp--, as the limitation lacks antecedent basis;

Claim 2, line 2, "a passage hole formed inside part of the winding core" does not clearly recite whether the passage hole formed on the inside part of the winding core, or the passage hole itself is an inside part of the winding core. Claim 2 has been examined considering the limitation "a passage hole formed inside part of the winding core" as --the passage hole formed on the inside part of the winding core--.

Claim 4, lines 3-6, "the male screw which can fasten and combine together a nut and a terminal connected to the flat cable, the said terminal connects and fixes the electrical wire of the flat cable inserted into the winding core." Is confusing, and it does not clearly describes details of Figures 8 and 9. Rephrasing of the above limitations is needed. Similar deficiency also exist in Claim 5, therefore Claim 5 is also objected.

Each of claims 4 and 5 has been examined considering the above-indicatted limitations, recited in lines 3-6, as:

-- the male screw in combination with a nut operationally connecting the brush electrode to the terminals of the flat cable; said terminal of the flat cable inserted into the winding core--.

Claim 9, line 4, "ballast box, in the ballast box combined with the lamp." is confusing, thus need rephrasing. Further, the all limitations included in the claim must be recited in one sentence. No "." sign must be included in the claim, except at the end.

Claim 9 has been examined considering the limitation without "in the ballast box" recited in line 4.

Claims 2-9 are necessarily objected because of their dependency on the objected base Claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Han (Korean Utility Model Application No.; 20-0279728), in view of EPS Electronics (German Patent No.: DE 29807516 U1), hereinafter referred as EPS.

Regarding Claim 1, the prior art Han (Korean Utility Model Application No.; 20-0279728), hereinafter referred as Han, is detailed in Figures 4 and 5, and in paragraph 0003 of the instant application. Therefore, this office action has referred Figures 4 and 5, and in paragraph 0003 of the instant application for examination.

Han discloses an auto lift lighting system (Figure 4) comprising:

- a motor part 201 for lifting operation of a lamp 200 (Instant Application, Figure 4, Para. 0003); a rotary drum parts 202 formed on both sides of the coaxial shaft of the motor parts 201 (Instant Application, Figure 4, Para. 0003); wires (cables) 203 supporting lamp 200 (Instant Application, Figure 4, Para. 0003); and the cables 203 winded on the winding cores or the rotary drum parts 201 (Instant Application, Figure 4, Para. 0003); a body cover part 207 receiving the motor 201, rotary drum 202 and the power supply parts 209 (Instant Application, Figure 4, Para. 0003); and a power stabilizing ballast 205 received in a ballast box 205 positioned below the body part 207 (Instant Application, Figure 4, Para. 0003).

Han discloses the auto lift lighting system (Figure 4) comprising a pair of wires for lifting the lighting system, and separate electrical elements for supplying power to the lighting system. However, Han does not specifically teach an auto lift lighting system

including a flat cable having composite structure including both electrically conductive cables and a wire rope supporting the lighting system.

On the other hand, EPS discloses an auto lift lighting system comprising a lighting system 10 supported with a composite flat cable 20 including electrically conductive power cables 22-24, and a pair metal wires 20 bearing the load of the lighting system 10 (Figures a-c, English translated abstract).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the auto lift lighting system, including its rotary drum, of Han by providing and accommodating the flat composite cable as taught by EPS for benefit and advantage of cost saving resulting from reduction number of parts, and to facilitate powering the lamp irrespective of its position.

5. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Han (Korean Utility Model Application No.; 20-0279728), in view of EPS Electronics (German Patent No.: DE 29807516 U1), as applied to Claim 1 above, and further in view of Strauss (US Patent No.: 6,837,340 B2).

Regarding Claims 6-8, Han in view of EPS discloses an auto lift lighting system comprising a flat flexible cable including electrically conducting wires and a pair of steel wire ropes. However, neither combined nor individual teaching of Han and ESP specifically disclose flat cable including stainless steel ropes and electrically conducting wires encased in a PVC sheathing.

On the other hand, Strauss ('340 B2) discloses a flat cable 10 (Figure 4) including a flexible PVC material 12 encasing electrically conducting wires 28 and steel

wire ropes 20a and 20b (Figure 4, column 3, lines 9 and 10; and column 7, lines 4-12).

However Strauss ('340 B2) teaches the use of steel wire ropes instead of wire ropes of stainless steel material well known in the art,

It would be have been obvious to one of ordinary skill in the art at the time of the invention to further modify the auto lift lighting system of Han in view of EPS by providing the flat composite cable as taught by Strauss ('340 B2) for benefit of facilitating winding of cable evenly and compactly.

Allowable Subject Matter

6. Based on best understanding, claim 2-5 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record, including Han (Korean Utility Model Application No.; 20-0279728), in view of EPS Electronics (German Patent No.: DE 29807516 U1), does not show or suggest the applicant's invention as claimed. Specifically, the prior art of record does not disclose an auto lift lighting system combining:

- a flat cable inserted in the winding core via a passage hole in combination with an insertion hole both defined on the winding core; and the flat cable connected to a brush electrode as recited in claims 2 and 3;
- the male screw in combination with a nut operationally connecting the brush electrode to the terminals of the flat cable; said terminal of the flat

cable inserted into the winding core as recited in each of claims 4 and 5;
and

- a lever having its center connected to the center of gravity of the ballast box, which is combined with the lamp; and each end of the lever connected to an end of each of the flat cable as recited in Claim 9.

The above indicated combination; including a typical arrangement of flat cable and its terminal connections with a winding core, and relative positioning of brush electrodes with respect to the winding core, makes this invention unique.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hartley (US Patent No.: 6,669,135 B1)


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hargobind S. Sawhney whose telephone number is 571 272 2380. The examiner can normally be reached on 6:15 - 2:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571 272 2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HSS

1/31/2006


ALI ALAVI
PRIMARY EXAMINER